

CLAIMS

What is claimed is:

1. A slotted substrate for use in a fluid ejecting device comprising:
a substrate having a thickness extending between generally parallel first and second surfaces; and,
a slot received in the first surface and extending along a long axis, the slot having a first cross-section generally parallel to the first surface, the first cross-section having a first shape, and the slot having a second cross-section generally parallel to the first surface and spaced from the first cross-section, the second cross-section having a second shape comprising a central region and at least one terminal region joined with the central region wherein the terminal region when measured orthogonally to the long axis of the slot is wider than the central region measured orthogonally to the long axis.
2. The slotted substrate of claim 1, wherein the first shape approximates a rectangle.
3. The slotted substrate of claim 1, wherein said at least one terminal region comprises two terminal regions.
4. The slotted substrate of claim 1, wherein said terminal region is elliptical.

5. A print cartridge incorporating the slotted substrate of claim 1.
6. A print head comprising:
a substrate extending between generally opposing first and second surfaces;
and,
a slot received in the substrate and extending along a long axis, the slot having a central region and at least one terminal region which are arranged generally along the long axis, wherein the terminal region comprises, at least in part, a bowl-shaped portion.
7. The print head of claim 6, wherein the bowl-shaped portion has a diameter at the first surface greater than a width of the central region at the first surface.
8. The print head of claim 6, wherein the bowl-shaped portion is generally frusto-conical.
9. The print head of claim 6, wherein the bowl-shaped portion is generally hemispherical.
10. The print head of claim 6, wherein the bowl-shaped portion comprises a central axis that extends generally orthogonal to the first surface of the substrate.

11. The print head of claim 10, wherein the central axis extends through the long axis.

12. The print head of claim 6, wherein at least a portion of the central region is rounded at the first surface.

13. The print head of claim 6, wherein at least a portion of the central region is chamfered at the first surface.

14. The print head of claim 6, wherein the bowl-shaped portion has varying diameters along a central axis that is generally orthogonal to the first surface.

15. The print head of claim 6, wherein the at least one terminal region comprises two terminal regions.

16. A print cartridge incorporating the print head of claim 6.

17. A substrate having fluid handling slots comprising:

a substrate having a thickness between generally opposing first and second surfaces;

a slot received in the substrate and having a central region joined with four terminal regions, wherein the central region extends between the first and second surfaces; and,

the four terminal regions individually comprising, at least in part, bowl-shaped portions, wherein two of the terminal regions are disposed proximate the first surface and the other two terminal regions are disposed proximate the second surface.

18. The substrate of claim 17, wherein when measured generally orthogonal to a long axis of the slot, the two terminal regions disposed proximate the first surface are wider at the first surface than the central region at the first surface.

19. The substrate of claim 17, wherein the two terminal regions proximate the first surface have equivalent diameters near the first surface.

20. The substrate of claim 17, wherein the terminal regions have identical shapes.

21. A print cartridge comprising, at least in part, the substrate of claim 17.